

Comanche – A Logistician’s Perspective

Complete Flow of Information Vital

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Getting through the Comanche Advanced Technology Helicopter Milestone II (MSII) Review was a challenge similar to flying “Hours of boredom intermixed with moments of panic.” In this article, I will try to pass along those things done correctly and, more importantly, those things we did wrong and would do differently in the future. These, I believe, are *all* lessons learned that may ultimately be of some benefit to the acquisition community at large.

Document — And Start Early!

One of the earliest lessons learned concerns preparation of program documentation (Figure 1). Start this process as early as possible. A large number of program documents are the responsibility of the Logistician. Those documents prepared in-house are generally controllable; that is, you can determine a schedule and track progress on a daily basis. However, when those same documents are sent to other areas for review and approval, you lose control and, on some occasions, spend an inordinate amount of time trying to get someone within the approval organization to take the time and effort to review and approve your document. Those documents that you are responsible for, but are prepared by other organizations, will give you many sleepless nights.

Much to our amazement, not everyone from outside organizations believed that successful completion of the Comanche MSII was the single most important event in their lives and that they should immediately drop the rest of their priorities and finish any Comanche-related work. It took lots of coercion, several phone calls, and personal visits to get

everything completed and approved on time.

Lesson Learned

Start program documentation as early as technically possible.

Get Senior Leadership Buy-in

Approximately five months before the actual milestone, the Comanche Supportability Division hosted a meeting in Huntsville, Ala., and presented a very detailed eight-hour overview and status of all logistics work completed in

Demonstration/Validation, and planned for the Engineering and Manufacturing Development (EMD) phase. We invited several high-level Department of Army (DA) and Office of the Secretary of Defense (OSD) personnel to this meeting to bring everyone up to speed on our initiatives.

The following day we traveled to the Sikorsky Flight Test Center in West Palm Beach, Fla., to observe how the Supportability/MANPRINT [Manpower and Personnel Integration] initiatives actu-

Document	Document
Acquisition Program Baseline	* Health Hazard Assessment Report
Acquisition Strategy	* Independent Safety Assessment
Affordability Assessment	* MANPRINT Assessment
Army Cost Position	* Human Engineering Assessment
* Basis of Issue Plan	* Manpower, Personnel, and Training Assessment
Component Cost Analysis	* Soldier Survivability Assessment
Contract Cost Data Reporting Plan	Analysis of Alternatives (AoA)
Cost Analysis Requirement Description	C4I Support Plan
Full Funding	CIO Assessment
Independent Estimate of Life Cycle Cost	Comanche Software Development Plan
Low Rate Initial Production Quantities	Critical Operational Issues and Criteria
Program Life Cycle Cost Estimate	* Exit Criteria
Modified Integrated Program Sum (MIPS)	International Cooperative Opportunities
* Containment Cost Management Annex (SCMA)	Industry and Technical Base Capability
* Transportability Report/Engineer Analysis	Live Fire Test and Evaluation Strategy
* Configuration Management Plan	Operational Requirements Document (ORD)
* Distribution Plan	Performance Weapon System Specification
* Programmatic Environmental, Safety, and Health Evaluation	Risk Management Plan
* Supportability Plan	System Evaluation Report
* System MANPRINT Management Plan	System Threat Assessment Report
* System Training Plan	Test and Evaluation Master Plan
* Responsibility of Support Division	

FIGURE 1. Milestone II Documentation

Reading is the Chief, Supportability Division, Comanche Program Management Office, Redstone Arsenal, Ala.

ally influenced the design of the Comanche. Proving very beneficial, this action ensured our senior leadership fully understood and endorsed our Supportability program. We subsequently gave this same briefing to the U.S. Army Materiel Command and the U.S. Army Aviation and Missile Command working-level and supervisory personnel.

Lesson Learned

Make sure your Supportability briefing is presented outside the Pentagon; it's the only way you will get enough time with senior leadership to tell your story. In addition, the review of actual hardware carries more of an impact than all the charts you can develop in a month.

Ensure Directives Are Met or Waived

In July 1999, the Under Secretary of Defense (Acquisition, Technology and Logistics) published a letter requiring that Acquisition Category ID (ACAT ID) programs address Department of Defense depot and industry capabilities and capacities no later than the MSII Defense Acquisition Board (DAB). The Army Acquisition Executive further supported this requirement. We became aware of the requirement in November 1999.

It had always been our intent to perform this analysis, though not before the MSII DAB. In fact, we had programmed funding and planned for resources in the 2003 time frame, which allowed a window to adjust for new processes and economic changes prior to the award of any support contracts (Figure 2). Due to the short suspense, and in response to the new OSD/DA directive, we immediately requested a waiver and moved the programmed study to the left as far as possible: Calendar Year 2001. While waiting for a waiver, we briefed every organization that we believed had a vested interest in our program to show that our new schedule fit within the spirit of the guidance. We received no opposition to our plan.

In January 2000, we received a waiver from DA allowing the program to proceed to the MSII DAB.



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Although everyone who was briefed at OSD agreed with our approach, when the time came to “check the boxes,” we had not staffed the waiver with all the right offices.

Lesson Learned

What appeared to be a minor issue could have affected our Milestone approval date. *When there is a clear directive to conduct an activity, the results of that activity or appropriate waiver must be submitted to the requiring office for approval.* As a minimum, coordination should be accomplished as soon as possible.

Don't Neglect Operational and Administrative Requirements

At this point, it is appropriate to discuss the last four weeks leading up to the Milestone. The Comanche/Washington pre-brief team consisted of the Program Manager, Deputy Program Manager, and the Chiefs of the Technical, Programs, and Supportability Divisions. We had a small office in Crystal City, Va., and used that as our base of operations. We pre-briefed one or two organizations each day leading up to the DAB, then met each evening to compare notes and revise (if required) the core briefing for the next day. This system worked very well, and allowed a complete flow of information across all areas.

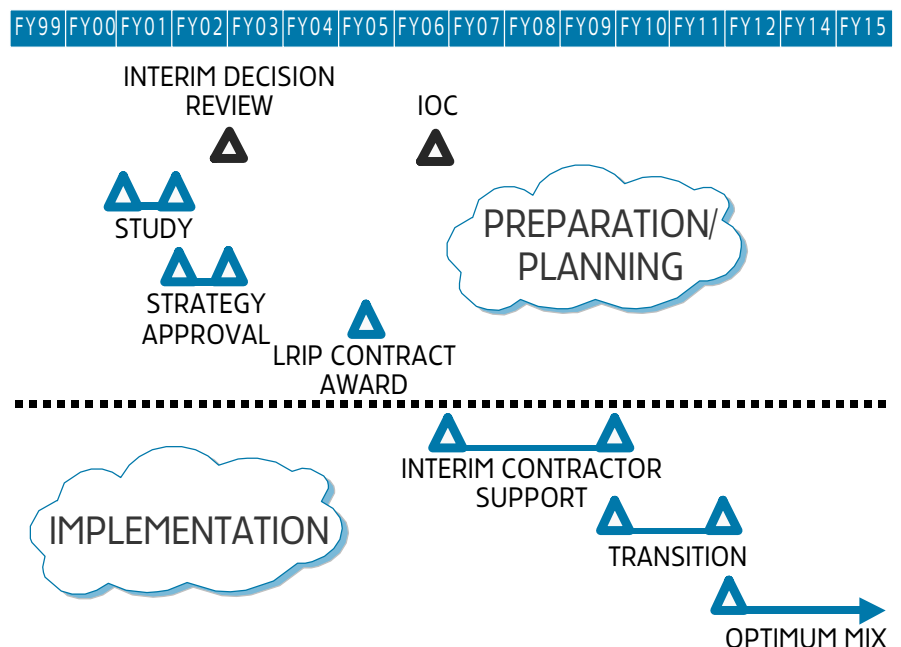


FIGURE 2. Comanche Support Plan

Lessons Learned

- *Find a good duplicating machine with lots of toner and paper.* It will soon become your best friend.
- *Bring your own laptop computer.* Don't depend on anybody for computer support.
- *Bring every chart you have on every subject.* Sooner or later, someone will ask you a question, and the chart you need will be at home.
- *If you're not already a PowerPoint expert, become one* before you head to Washington.
- *Be prepared to put your personal life on hold.* This is not the time to try to paint the kitchen on weekends.

Be Alert to Potential "Showstoppers"

Now, let me relate one near fatal mistake that almost derailed the entire Milestone process. It concerns Comanche Reliability going into the Initial Operational Test and Evaluation (IOT&E). The pro-

gram intent was to show that the aircraft design was mature enough to meet 90 percent of the Operational Requirements Document (ORD) reliability requirements by the end of IOT&E. This was to be achieved via a combination of demonstrated reliability and expected reliability growth from fixes that could not be installed on the IOT&E aircraft, due to schedule constraints.

We learned within the last two weeks prior to the Milestone II decision, that the operational test community desired near-ORD reliability to be actually demonstrated prior to entering IOT&E. After several meetings in the final week, just prior to the DAB, a compromise was reached that the Comanche would demonstrate approximately 70 percent of the ORD reliability requirement before entering IOT&E.

Lesson Learned

Establish and communicate clear and concise reliability goals, as well as the reliabil-

ity growth methodology to be used. Ensure everyone understands how reliability growth curves are developed and used.

There's Rest At the End of the Day

I sincerely hope my lessons learned will be of some value to you, and I certainly agree with the Comanche Program Manager in the first of this series of articles, that getting through a successful milestone review is indeed a highly rewarding experience and a journey that I would recommend to everyone. However, if you're going to make that trip anytime soon, please don't call me. I think I'll stay home for awhile.

Editor's Note: The author welcomes questions or comments on this article. Contact him at Charley.Reading@comanche.redstone.army.mil.

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